

Instrumentation and Controls Technology* (AAS Non-Transfer Degree)

Science, Technology, Engineering & Mathematics Career Cluster and the Manufacturing Career Cluster

SAN JUAN COLLEGE

NATURE OF WORK

Organizations and businesses depend on complex electronic equipment for a variety of functions. Industrial controls automatically monitor and direct production processes on the factory floor. Electric power companies use electronic equipment to operate and control generating plants, substations and monitor equipment. The oil and gas industry uses technicians to maintain field equipment or compression stations. All of these complex pieces of electronic equipment are installed, maintained, and repaired by electrical and electronics technicians.

WORKING CONDITIONS

Many electrical and electronics technicians work on factory floors and are subject to noise, dirt, vibration, and heat. A bench technician works in a repair shop, where it is relatively quiet, comfortable and well lighted. In some cases technicians may have to do heavy lifting and work in a variety of positions. Technicians who work on medical, precision and instrumentation equipment normally work daytime hours, but are often expected to be on call. Some technicians may work irregular hours, especially if they are factory or hospital employees.

TRAINING & QUALIFICATIONS

For employment a knowledge of electrical equipment and electronics is necessary. An applicant needs to have the ability to read and understand technical manuals. They also need to have fine motor skills and good vision. Employers prefer applicants with some postsecondary education. Applicants may gain this knowledge through programs lasting one to two years at technical schools or community colleges.

JOB OUTLOOK

Opportunities for jobs should be best for applicants with a thorough knowledge of electrical equipment and electronics, as well as repair experience. The growth projection for instrumentation, electrical and electronics technicians of commercial and industrial equipment is expected to be high. Retirement of baby boomers in the electric utility and oil/gas industry should keep demand high in this field for the next several years.



Reviewed on February 25, 2010

CAREER OPTIONS

Instrumentation, electrical and electronics technicians

ESTIMATED SALARY RANGE

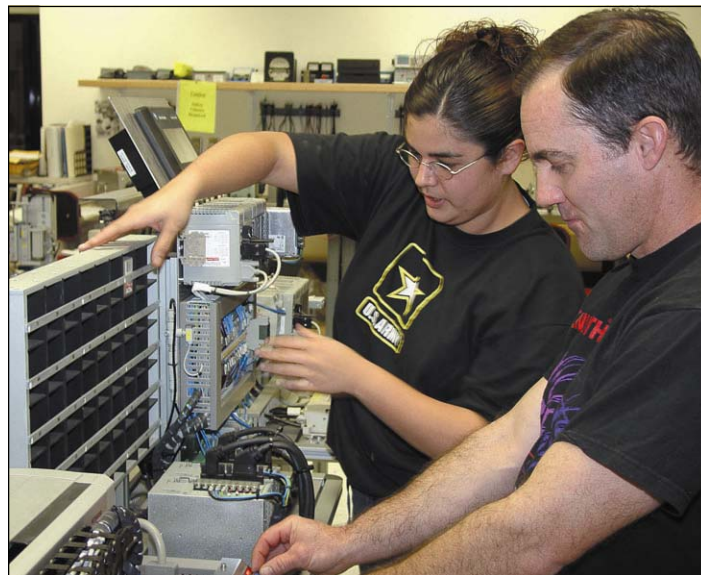
Nationally — \$39,300 - \$73,200
New Mexico — \$40,440 - \$69,500
(w/industrial experience this career could start at \$60,000)

RELATED OCCUPATIONS

Manufacturing technician, industrial electrician, automation technician

SJC Basic Program Information

A student must earn a grade of "C" or higher in all courses in order to receive a degree.



For further information go to:

www.sanjuancollege.edu/inst
www.sanjuancollege.edu/pages/158.asp
www.bls.gov/oco/ocos184.htm
www.acesinternational.org/

*This information is from the Coordinator of the SJC Instrumentation and Controls Technology program and the Occupational Outlook Handbook, 2010-2011